ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMORANDUM

DATE: September 17, 1980

TO: Division File

FROM: Mike Gifford

SUBJECT: DUPAGE COUNTY - L.P.C. #04380301
LISLE TOWNSHIP/GREENE VALLEY LANDFILL
COMPREHENSIVE PERMIT REVIEW

INTRODUCTION

On September 17, 1980, a comprehensive permit review was conducted at the Lisle Township/Greene Valley Landfill in DuPage County, Illinois. In attendance were the following: Scott Otterson, site engineer from Chemical Waste Management; Lou Bohlander, site supervisor; Scott Gerrick, Environmental Testing Coordinator from the DuPage County Forest Preserve; and myself, representing this Agency. The main objectives of this review were to discuss past, present, and future operations of the landfill with emphasis on problem situations, anticipated site modifications, if any, and additional topics relevant to the operation of the facility.

SITE BACKGROUND

The subject site, located in the Greene Valley Forest Preserve, comprises 200 acres and is part of an extensive glaciated area designated as the Central Lowland Province. The eastern portion of the site is underlain by a terrace of the East Branch of the DuPage River while the western portion is underlain by an area of higher and rolling relief. The terrace lies about 45 feet above the flood plain of the river. Glacial deposits were found from the borings to generally vary between 40 and 60 feet in thickness and overlie Silurian-age dolomite.

The Lisle Township/Greene Valley Landfill received its operating permit in October, 1974 to handle municipal refuse and 2000 gallons of septic tank pumping per day. In August, 1977, a supplemental permit was granted to process and dispose of lagooned anaerobically digested secondary sanitary sewage sludge from M.S.D. of Greater Chicago. This permit was renewed in January, 1978. On October 17, 1978, an ordinance was passed by the Forest Preserve District of DuPage County ordering "that no liquid be dumped at the Greene Valley Landfill ... except septic tank pumpings and approved sludge." Subsequent action by the forest preserve commission discontinued the disposal of all liquid wastes, with the exception of septic tank pumpings, pending further study of the geologic integrity of the facility.

In September, 1978, a supplemental permit was issued to modify operation of the facility by discontinuing the installation of the perimeter leachate collection system. This subject is discussed in greater detail in the narrative of the review.

One additional site modification permit was issued in August, 1980 for the construction of seven new monitor wells. Some of the existing wells had been screened in clay and were not providing enough sample for full analysis.

PROCEEDINGS AND DISCUSSION DURING THE REVIEW

1. Relocation of Greene Road - Scott Gerrick explained that Forest Preserve engineers are currently planning the relocation of Greene Road based on the original plans which show it to be situated along the eastern perimeter of the site.

2. Downhill Compaction of Refuse - Some confusion had arisen over this method of operation as no supplemental permit could be located. Upon careful review of the original permit application to develop this facility, condition 34(d) of the Description of Operating Procedures disclosed "Loose refuse may be pushed from the bottom or from the top of the slope." The subsequent operating permit does not state otherwise; therefore, this method of operation is in accordance with conditions stated in their permit application and does not constitute a violation of Chapter 7. It was recommended that this procedure be employed only during inclement weather and during the placement of the initial lift in a trench.

3. Monitor Wells - Recently installed monitor wells (Supplemental Permit No. 80-2108) should be properly identified by labelling each well. Scott Gerrick recommended that all future wells for monitoring be 4 inch wells.

4. N.P.D.E.S. PERMIT - With the new open dump inventory criteria, Scott Gerrick suggested that Scott Otterson look into possible permit requirements for the off-site discharge of surface water runoff. Will an N.P.D.E.S. permit be required and if so, what are sampling and pumping guidelines?

5. Leachate Collection System - Pursuant to Supplemental Permit No. 78-1762 issued September 18, 1978, this Agency no longer requires installation of the perimeter leachate collection system. As it stands now, the Forest Preserve District has a valid understanding with Waste Management to install the pipe according to plan. In the best interest of all parties, it was suggested by this Agency that Waste Management submit a letter to Springfield requesting reinstatement of Supplemental Permit No. 78-1762 and all conditions therein. All pipe installation would be inspected by both Forest Preserve and Agency personnel prior to backfilling to insure integrity of the system. This would enhance communication between the Forest Preserve District and this Agency.

   As installation of the leachate pipe has progressed, additional upright vent pipes have been put in. Scott Gerrick would like these to remain for future monitoring, flare-off, and/or gas recovery. Waste Management agreed to this and I felt a supplemental permit was not necessary for this minor modification.

   Concern was expressed by both the Forest Preserve District and Waste Management over the existence of the north-south extension of the leachate collection pipe along the eastern perimeter of AREA 2 (see attached diagram). Review of Agency files revealed that the preoperational inspection of October 3, 1974 confirmed the installation of 300 feet of pipe; however, this initial trench extended for more than 1000 feet. Based on the lack of data, it was agreed that as excavation begins in AREA 3, verification of the presence or absence of the pipe is necessary prior to fill activities. If the pipe cannot be located, new pipe will be installed according to plans.

6. Redesign of Final Contours - According to Scott Otterson, revisions in hill shape and final contours are anticipated as a future site modification.

Current plans provide for the development of a dual hill system with a saddle between the hills. A new design would probably propose one large hill incorporating a bowl shape for snow accumulation. An important determining factor in the redesign is available cover material. The current design requires the maximum volume of cover material for completion whereas any modification will require lesser amounts. As the fill progresses, on-site cover sources will become more scarce eventually requiring cover material from outside sources. The excavation of a 55 acre lake to the northwest will provide a short term source of cover material; however, long range planning has led to the need for site redesign.

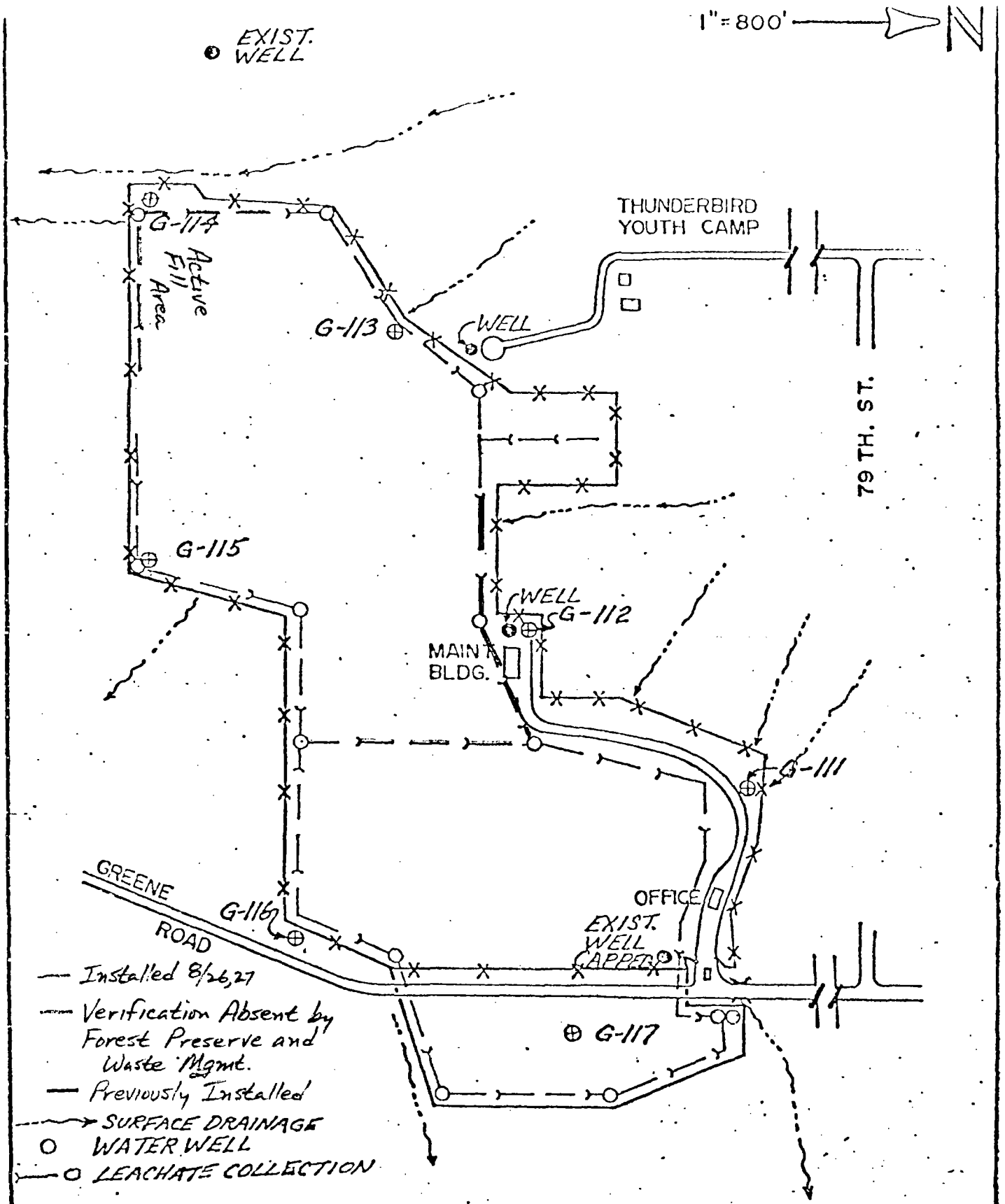
7. Sludge Farming Beds - Directly east of AREA 1 (AREA 3) are the old sludge farming beds utilized when the landfill was accepting digested sanitary sewage sludge from M.S.D. Waste Management would like to use this sludge-top soil mixture for daily cover over future lifts when excavation is initiated in AREA 3. I informed Scott Otterson that a supplemental permit would be necessary for this procedure which may include a special condition for application on below grade lifts only.

8. Immediate Future Operations - When questioned on the sequence of operations over the next year, Scott Otterson replied they will continue progressing northward and eastward in AREA 2 subsequently filling in the access road. The final fill in AREA 2 will be the north rectangular extension in the northwestern portion of the site. Here, the nature of subsurface features necessitate considerable excavation with backfilling of suitable materials for perimeter and bottom seals.

9. Acceptance of Special Wastes - As a part of monthly public meetings by the Forest Preserve Commission, the Forest Preserve District will be considering the potential for the acceptance of special wastes at both the Lisle Township/ Greene Valley and Bloomingdale Township/Mallard Lake landfills. At the present, criteria have not been established nor has the issue been brought up for consultation. In the event that special wastes will be accepted, the ecological, geological, and other pertinent impacts on the environment must be weighed.

Encouraging feedback was received from all attending parties at the conclusion of the review. It was generally felt that this is a beneficial format in that it promotes positive interaction between the respective agencies. It is recommended that this type of review be conducted on an annual basis.

cc: Bill Child
Tom Cavanagh
Northern Region ✓
Ken Bechely



GREENE VALLEY LANDFILL

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DATE 4-1-80

SHEET 1 OF 1

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